



PREVENTION OPPORTUNITIES UNDER THE BIG SKY

The Importance of Preconception Health

Preconception health of women of reproductive age (between the ages of 15 and 44 years) can affect their ability to become pregnant, their health during pregnancy, pregnancy outcome, and their health as a parent. In 2010, there were 179,670 women of reproductive age in Montana¹. During the same year, 11,634 births occurred in Montana. Many women in Montana are entering pregnancy with risk factors that affect their health as well as health of their infants. Preconception care includes health education, screening, and interventions for women of reproductive age to reduce risk factors that may adversely affect their pregnancies. Because nearly half of all pregnancies are unintended,² preconception care should be part of routine care, even for women who are not actively seeking pregnancy.

Unintended Pregnancy. In 2002, 44% of pregnancies in Montana were unintended at the time of conception.³ Unintended pregnancy is defined either as mistimed or unwanted at the time of conception. Women with unintended pregnancies are less likely than those with intended pregnancies to seek prenatal care during the first trimester, and more likely to use alcohol and tobacco during pregnancy.⁴

Public Health Concerns. Maternal and child health outcomes, such as maternal and infant mortality, preterm births, and low birth weight, are often used as indicators of the overall health status in a population.⁵ Many risk conditions or behaviors may be pre-existing or may occur early in pregnancy, including overweight, smoking, alcohol use, diabetes, and hypertension.⁶

Among non-pregnant Montana women aged 18-44 years surveyed by the Behavioral Risk Factor Surveillance System (BRFSS) during 2008, 2009, and 2010, over half reported alcohol use during the past 30 days, almost one quarter were current smokers and 28% were overweight (Figure 1). Two percent of women reported being diagnosed with diabetes and 3% reported being diagnosed with gestational diabetes.

Among Montana women aged 18-44 years who gave birth during 2008, 2009, and 2010, 25% were overweight prior to pregnancy (Figure 2). One percent had preexisting diabetes or hypertension before their last pregnancy. During pregnancy, 1% of women used alcohol, 17% smoked, 3% developed diabetes and 5% developed hypertension.

Figure 1. Risk factors among non-pregnant women aged 18 to 44 years, Montana BRFSS, 2008-2010.

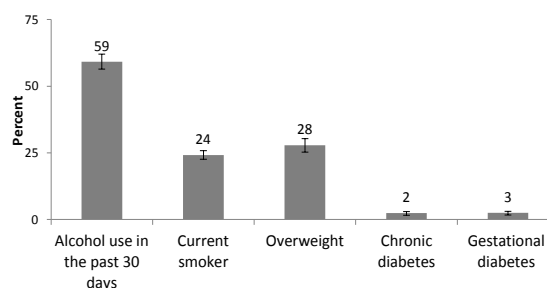
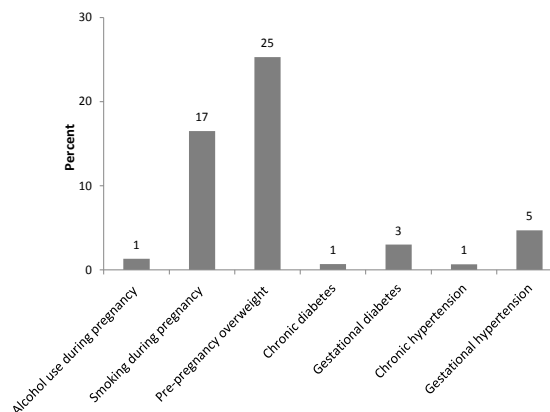


Figure 2. Risk factors recorded on birth certificates for women aged 18 to 44 years, Montana Office of Vital Statistics, 2008-2010.



Role of Health Care Providers

Preconception decisions are important because steps taken only during pregnancy may not fully mitigate certain risk factors. At least three months before attempting to become pregnant women should take steps to help assure a healthy pregnancy and newborn. Talking with a healthcare provider is a valuable way to review issues such as being up-to-date with immunizations, eating a healthy diet, taking folic acid, and avoiding alcoholic beverages. Behavioral changes such as quitting smoking or reaching a healthy weight

should begin even earlier.⁷

All providers who routinely provide health care for women of reproductive age have a role in improving preconception health. Preconception care should be tailored to meet the needs of the individual woman. This care should be provided with attention relevant to each woman at her life stage and level of risk. Women with chronic diseases, previous pregnancy complications, or behavioral risk factors will need more intensive education, counseling and support.⁶

Recommendations for Providers in Improving Preconception Health

- Encourage men and women of reproductive age, especially teens, to make a reproductive life plan (RLP).
- Educate men and women of the importance of contraception in their RLP.
- During primary care visits, providers should assess and take appropriate action steps
 - a. the use of medications such as isotretinoin, oral anticoagulants, and anti-epileptics
 - b. chronic conditions such as HIV/AIDS, hepatitis B, PKU, hypothyroidism, diabetes, and hypertension
 - c. modifiable risk factors such as obesity, alcohol use, and smoking
 - d. vaccination status for rubella.
- Based on individual assessment, provide educational and health counseling and interventions to reduce reproductive risks and improve pregnancy outcomes.
- Educate women of reproductive age to take 400-800 micrograms of folic acid each day to decrease the risk of neural tube birth defects.
- Screen for alcohol, tobacco and drug use, and provide appropriate interventions.
- Educate women of reproductive age about how chronic conditions like asthma, diabetes, oral health, obesity and epilepsy may affect pregnancy and birth. Provide referrals and interventions to help women control chronic conditions before pregnancy.

For more information, contact Colleen Lindsay, MPA, Section Supervisor for Women's and Men's Health, clindsay@mt.gov, 406-444-3755.

References:

1. U.S. Census Bureau, 2010 Census. Summary File 1, Tables P12, P13, and PCT12.
2. Centers for Disease Control and Prevention. Unintended pregnancy prevention. Available at <http://www.cdc.gov/reproductivehealth/unintendedpregnancy/> Accessed December 22, 2011.
3. Centers for Disease Control and Prevention. CPONDER. Montana 2002 PRAMS data. Available at <http://apps.nccd.cdc.gov/cPONDER/>. Accessed December 5, 2011.
4. Santelli et al. The measurement and meaning of unintended pregnancy. Perspectives on Sexual and Reproductive Health. 2003; 35: 94-101.
5. Centers for Disease Control and Prevention. Preconception health and care 2006. Available: <http://www.cdc.gov/ncbddd/preconception/documents/At-a-glance-4-11-06.pdf>
6. Centers for Disease Control and Prevention. Recommendations to improve preconception health and health care – United States: a report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care. MMWR 2006; 55(RR-6):1-23.
7. Office of Women's Health in the Office of the Assistant Secretary for Health at the U.S. Department of Health and Human Services. Preconception health. Available online at: www.Womenshealth.gov/pregnancy/before-you-get-pregnant/preconception-health.cfm.

2,275 copies of this public document were published at an estimated cost of \$0.67 per copy, for a total cost of \$1524.25, which includes \$ 518.49 for printing and \$1005.76 for distribution.



1400 Broadway
Helena, MT 59620-2951

Anna Whiting Sorrell, Director, DPHHS
Steven Helgersen, MD, MPH, State Med. Officer
Jane Smilie, MPH, Administrator, PHSD